Blood-Stream Infection (CDC)

From: Earhart, Ann [Ann.Earhart@bannerhealth.com]
Sent: Wednesday, December 02, 2009 2:56 PM
To: Blood-Stream Infection (CDC)
Subject: comments for new CDC guidelines
Attachments: Brookdale Garcia.pdf; May 2008 Pediatrics Article.pdf

First, excellent use of evidence and literature for the new guidelines!! Bravo.

Now, my comments

1. Line 405: the use of sleeves. Use of sleeves to cover all non-sterile devices used for procedure: such as the ultrasound probe cover, since it is now recommended for central line insertions. You'd be surprised how many don't put on sleeves.
2. Line 832: Use of midline. The midline has its limits. Be sure and put in reference that midlines are a peripheral, and for peripheral type medications with pH between 5 and 9 and osmolarity less than 600. We get too many physicians ordering midlines for Vancomycin. The tip of the midlines are auxilla, not midchest.
3. 1044-Is there any way to change the wording "no more frequently". Many clinicians find this confusing. We put the wording in policies right from CDC and nurses get confused if tubings should be changed at 24-48 hours if no more frequently than 72 hours, or if it's OK to let tubings go to 96hours to one week. I know a lot of us would appreciate a more Direct wording.
4. Biopatch or chlorhexidine: There is strong evidence of getting to zero infection with and without Biopatch. As healthcare providers, we need to do everything we can do to prevent infection needs to be done for our patients. There are two articles that support Biopatch in studies: Article in Ann Hematology (2009), 88:267-272. Prevention of central venous catheter related infections with chlorhexidine gluconate impregnated wound dressings: a randomized controlled trial, by Ruschulte, Franke, Gastmeier. A second article: Adding Chlorhexidine Patch to the IHI Bundle. American Journal Of Infection Control (2006), 34 (5). Garcia, Jendresky, Nicolas, Colbert, Dumont.
5. Cap section: This section is going to cause more grief than you will know. Please be careful with this section. There are cap wars right now with neutral and positive, and there are positive pressure caps without valves, so this will be hard. What is a split septum valve? In articles written by Marcia Ryder has referred to Clave as a "reverse split septum device" so then what is a mechanical valve? Multiple moving parts that move independent of each other and create an interstitial space in which residual moisture can accumulate. Opaque caps that are made with this design have created the need of frequent change out policies due to the risk of bacterial growth in the interstitial space. The Interlink is the split septum device that shows a consistently low infection rate. A study by Garcia et al. study showed a positive pressure cap (MaxPlus design (flolink) comparable to the interlink. Data collected by Royer (2008)showed the Clear MaxPlus significantly improved nursing practice and thus dramatically reduced false positive blood cultures.

   In my review of literature for caps for our facility, the difficulty I had with saying all positive pressure caps were bad was comparing one cap with another cap. Can it not be said that some positive pressure caps are better than neutral, or was it a bad positive pressure cap. There are now positive pressure caps without the valve. Maybe it could be referred to as a third generation of caps? I have included 2 more articles for your review. In reviewing the SHAE compendium, they compared excellent neutral caps to poor positive pressure caps. This is a blanket statement about caps. An assessment needs to be done for each cap individually on its performance.

There are also negative pressure caps. There are catheters that do not work with negative pressure caps, so just a statement about type of caps not to be used per manufacture recommendation. The big piece here is hand hygiene and scrubbing of the cap. Even then, there is independent studies that show different caps clean differently, over a different amount of time.

6. Line 1103-you made a statement about increased risk of occlusion with positive pressure caps? You need to site your source, I only found one or two sources on that…level 6 and 7 evidence I have found was reduction in occlusion with positive pressure. I truly can't find a big difference in the different between positive pressure and neutral pressure. BUT in practice, practitioners do have their opinions about the different caps. This is where I am coming from. Please try not to push the neutral cap over the positive pressure. The facilities that had switched to neutral from positive have had increased occlusions and infections. No published data. The statement needs to stay with the assessment of the caps, their needs of the clinicians….not the rep pushing caps because the CDC said so.

Thank you for your consideration.

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